

water stable globulin concentrate.

Please cancel claim 13.

In claim 23, line 2, please delete "about" and insert --approximately--.

REMARKS

I. Claim Rejections - 35 U.S.C. § 112

Claim 23 was rejected under 35 U.S.C. § 112, first paragraph, as not being enabled for the term "about". Applicant has now replaced the term "about" with "approximately" as invited by the Examiner. It is therefore respectfully submitted that this ground of rejection has now been alleviated.

II. Claim Rejections - 35 U.S.C. § 102

Claims 10, 12, 22-23, 26-29, and 31 were rejected under 35 U.S.C. § 102(b) as being anticipated by Newson and Atwell. Second, claims 10, 12, 22-29, and 31 were rejected under 35 U.S.C. § 102(b) as being anticipated by Elliot et al. Finally, claims 10, 12, 23-25, 27-29, and 31 were rejected under 35 U.S.C. § 102(b) as being anticipated by Frenyo.

Claim 10 from which the remaining claims ultimately depend has now been amended to provide that the animal is administered the supplement post-weaning as set forth in

claim 13, now canceled. Since the cited references do not teach the administration of a water stable globulin concentrate to animals post weaning, it is respectfully submitted that the cited claims are not anticipated by the cited references.

III. Claim Rejections - 35 U.S.C. § 103

Claims 10-14 and 22-31 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Stott et al. (U.S. Pat. No. 4,816,252) in view of Watanabe (Japan Patent No. 61-132132) and Elliot. The Examiner argues that one of ordinary skill in the art at the time the invention was made would have been motivated to encompass the claimed dosages, the claimed additives, and the claimed animal populations in order to achieve the referenced passive immunity and nourishment. The Examiner further states that it would have been expected that various concentrations and dosages would be required by animals of different ages and weights with different nutritional immunological needs. Applicants respectfully traverse this rejection.

The PTO bears the burden of establishing a case of prima facie obviousness. In re Fine, 837 F.2d 1071, 1074 (Fed. Cir. 1988). It is axiomatic that in order to establish a prima facie case of obviousness, the examiner must present evidence in the form of some teaching, suggestion, incentive or inference in the applied prior art

that one having ordinary skill in the art would have been
led to combine the relevant teachings of the applied
references in the proposed manner to arrive at the claimed
invention. Ex parte Levengood, 28 USPQ2d 1300, 1301 (Bd.
Pat. App. & Int'f 1993). This suggestion cannot stem from
the applicant's own disclosure, however. In re Ehrreich,
590 F.2d 902 (CCPA 1979).

The same inquiry must be carried out in the context of
a purported obvious "modification" of the prior art. In re
Fritch, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992). "The mere
fact that the prior art may be modified in the manner
suggested by the Examiner does not make the modification
obvious unless the prior art suggested the desirability of
the modification." Id.

The claimed invention relates to the administration of
a water stable globulin concentrate to animals through their
water source post-weaning. As described in the
specification, previous attempts at decreasing morbidity and
mortality in young animals have focused on the delivery of
supplements, including immunoglobulin-fortified supplements,
via dry feed or milk prior to the weaning period. (Spec. p.
9). There are, however, many problems associated with these
prior methods, including the expense and difficulty of
administrating the supplements with milk products. (Spec.
p. 9). Specifically, the fat from the milk products

FEB 17 2000

accumulates and plugs the water lines. (Spec. p. 5). The supplement must also be placed in the animals' food supply numerous times per day, thereby increasing labor costs. (Spec. p. 10). Further, the feeding devices must be thoroughly cleaned and disinfected daily to prevent bacterial contamination. (Spec. p. 5).

Another drawback to previous methods is that light-end pigs do not benefit from the feed supplements since they frequently will not eat during periods of stress post-weaning. (Spec. p. 9).

The claimed invention resolves these problems by providing a globulin supplement that is administered through the animals' water supply. (Spec. pp. 9-10). Since the globulin supplement is water-stable, it does not clog the lines of the animal's water system. (Spec. p. 10). It is also more convenient to administer since it does not have to be placed in the animals' food supply multiple times per day. (Spec. p. 10). Moreover, it provides a more effective method of improving the health of stressed animals post-weaning since the animals will consume Applicants' supplement through their water supply. (Spec. p. 10). In contrast, post-weaning animals may receive no benefit whatsoever from the feed supplements of the cited references since they will often go several days without consuming feed due to disease and lack of appetite. (Spec. p. 10).

The primary reference, Stott, teaches the administration of an immunoglobulin product extracted from milk whereby the filtered product is subsequently dissolved in a liquid such as colostrum, milk or water to achieve a desired Ig concentration. This retentate is then fed to newborn domestic animals within "the critical absorption period", or ideally within 8 hours postpartum (col. 2, lines 7-8) and no later than 24 hours post-partum (col. 2, lines 3-7). Watanabe and Elliot are merely cited for their teachings of the use of immunoglobulins as feed supplements. (Office Action p. 4, para. 11).

As set forth above, the Examiner cannot simply take judicial notice that it would have been obvious for one skilled in the art to have modified each and every one of the factors of dosages, additives, the claimed animal populations, claimed method of administration, and claimed time of administration (i.e. post-weaning) to arrive at Applicants' claimed method. Instead, the Examiner must show a suggestion in the prior art of the desirability of modifying these factors in the claimed manner.

There is absolutely no teaching or suggestion in the cited references of a method of improving weight gain and growth in animals post-weaning by administering a water-stable globulin supplement through the animal's water supply. In fact, Stott et al. teach away from the

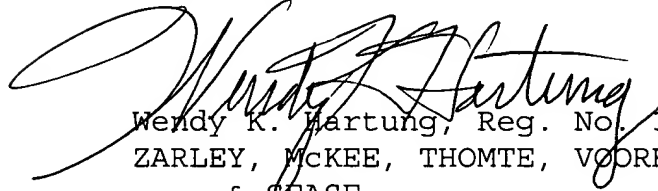
administration of an immunoglobulin composition post-weaning through its disclosure that administration of immunoglobulin later than twenty-four hours postpartum "will have very little effect on passive immune levels". Thus, using the teachings of Stott, one skilled in the art would not have been inclined to administer an immunoglobulin to an animal post-weaning since Stott teaches that no beneficial effect could be expected from such administration.

For all of these reasons, the claimed invention is not rendered obvious over Stott et al. in view of Watanabe and Elliot. Applicants therefore respectfully request that this ground of rejection be withdrawn.

IV. Conclusion

For all of the above-stated reasons, Applicant respectfully requests allowance of the application. It is not believed that any fees are due with this response. However, if a fee is due, please consider this a request to debit Deposit Account No. 26-0084 accordingly.

Respectfully submitted,

A large, stylized handwritten signature in black ink, appearing to read "Wendy K. Hartung".

Wendy K. Hartung, Reg. No. 39,705
ZARLEY, MCKEE, THOMTE, VOORHEES
& SEASE

Attorneys of Record

801 Grand Avenue - Suite 3200
Des Moines, Iowa 50309-2721
515-288-3667 - wm -